BRUHATH BANGALORE MAHANAGARA PALIKE									
Modified Estimate for Extension of Reva College Road upto CISF compound (BBMP limits)									
Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
1.00	SITE CLEARANCE AND DISMANTLING								
1	KSRRB M200-12.1. **Dismantling of existing structures like culverts,bridges**, retaining walls and other structure comprising of masonry,cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications.111) KSRRB M200-12.3. –do– C. Prestressed / Reinforced cement concrete grade M-20 & above.MORTH specification No.202	Cum							
	(P.No.133, I.No.18.19 of KPWD SR 2014-15)								
	For Building RCC Dismantling (RHS)								
	Existing Building		1	15.00	1.50	0.15	3.38		
	For Building Dismantling (LHS)								
	Hotel		1	1.20	1.50	0.15	0.27		
	Building 1		1	9.00	1.00	0.15	1.35		
			1	12.00	1.00	0.15	1.80		
			1	5.50	1.00	0.15	0.83		
	Column								
	Total Number		25	0.45	0.23	6.00	15.53		
							23.15		
							23.15	**954.72**	**22097.00**
2	KSRRB M200-14.1. **Dismantling of existing structures like culverts,bridges, retaining walls and other structure** comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. KSRRB M200-14.2. –do– Dismantling brick/Tile work B. In cement mortar.	Cum							
	(P.No.133, I.No.18.23 of KPWD SR 2014-15)								
	For Building Dismantling (LHS)								
			2	12.00	2.30	6.00	331.20		
			1	7.00	2.30	6.00	96.60		
	For compound wall (RHS)								
			1	60.00	0.23	2.25	31.05		
	For compound wall (LHS)		1	310.00	0.23	2.25	160.43		
							619.28	**226.80**	**140452.00**
3	KSRRB M200-15.1. **Dismantling of existing structures** like culverts,bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. KSRRB M200- 15.2. –do– B. **Rubble stone masonry in cement mortar.**	Cum							
	(P.No.134 &, I.No.18.27 of KPWD SR 2014-15)								
	For compound wall (RHS)		1	60.00	0.45	2.00	54.00		
	For compound wall (LHS)		1	310.00	0.45	2.00	279.00		

Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
4	**KSRRB M200-15.1.** Dismantling of existing structures like culverts,bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete asper specifications.– v) **KSRRB M200-17.1.Steel work** in all types of Sections uptoa Height of 5 m above plinth level excluding Cutting of Rivet. – A.Including dismembering."	Sqm					333.00	226.80	75524.00
	(P.No.134, I.No.18.33 of KPWD SR 2014-15)								
	steel gate		5	3.35		1.20	20.10		
5	**Dismantling cement concrete** flooring or plain cement concrete work including removing and conveying the debris to distance upto 200m (within average thickness of 15 cms).	Sqm					**20.10**	**1150.00**	**23115.00**
	(P.No.255, I.No.37.51 of KPWD SR 2014-15)								
	For compound wall (RHS)		1	60.00	0.45		27.00		
	For compound wall (LHS)		1	310.00	0.45		139.50		
6	**KSRRB M200-23.1.** Dismantling of flexible pavements and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. II. By Mechanical Means: A. Bituminous courses. MORTH Specification No. 202	Cum					**166.50**	**50.76**	**8452.00**
			1	396.00	3.5	0.1	138.6		
7	**Hire Charges of JCB, P.No.XXXXVI, Sl.No.23, I.No.1031**	Day					**138.6**	**470.88**	**65264.00**
			30	3.00			90		
8	**Hire Charges of Tipper, P.No.XXXXVI, Sl.No.09, I.No.1011**	Day					**90**	**6,720.00**	**604800.00**
			30	5.00			150		
							150	**1,920.00**	**288,000**
		COST OF SITE CLEARANCE & DISMANTLING WORKS							**1227704.00**
2.00	**ROAD WORK**								
9	**KSRRB M300-11. Excavation for road way in soil by mechanical means** including cutting and pushing the earth to site of embankment upto a including trimming bottom and side slopes in accordance with requirements of lines, grades and cross sectins complete as per specifications . (P-139/19.11)	Cum							
	Existing Road		1	396.00	8.82	0.300	1047.82		
	TOTAL						**1047.82**	**193.75**	**203016.45**

Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
10	**KSRRB M300-55. Construction of sub-grade** and earthen shoulders with approved material Gravel/Murrum with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table No. 300-2 complete as per specifications (including cost of earth, watering charges & compaction by vibratory roller) MORTH Specification No. 305	Cum							
	0		1	396.00	8.82	0.2	698.54		
							698.54	**252.72**	176536.04
11	**KSRRB M400-6.1.** Construction of **granular sub-base** by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. (P - 151/20.4.2) **For Grading II Material.**	Cum							
	0		1	396.00	8.82	0.15	523.91		
	TOTAL						**523.91**	**1298.16**	680116.41
12	**KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification no.406 (P - 154/20.18)	Cum							
	0		1	396	8.82	0.15	523.91		
	TOTAL						**523.91**	**1500.00**	785862.00
13	**KSRRB M500-6. Providing and applying primer coat** with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of **0.60 kg / sqm** using mechanical means complete as per specifications. MORTH Specification No.502 (P - 157/21.6)	Sqm							
	0		1	396	8.82		3492.72		
	TOTAL						**3492.72**	**35.21**	122971.6858
14	**KSRRB M500-7.** Providing and applying **tack coat** on the prepared black topped surfaces at **2.5 Kg per 10 Sqm**, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 (P157/21.7)	Sqm							
	Tack Coat For BM								
	0		1	396.00	8.82		3492.72		
	Tack Coat For BC								
	0		1	396.00	8.82		3492.72		
	TOTAL						**6985.44**	**18.74**	130893.17

Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
15	**KSRRB 500-16.** Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base or binding coarse including loading of aggregates with F.e loader hotmixing of stone aggregates and bitumen in hotmix plant 40 Tonnes capacity, transporting the mixed material in tipper To paver and laying with paver finisher To the required grade rolling by power roller To aachieve the desired density, 50x75mm compacted thickness with 3.3% bitumen but excluding cost of primer or tack coat with lead upTo 1km including cost of all materials, labour as per specifications With 60/70 grade bitumen Page no 158 It no 21.11.2	Cum							
	0		1	396.00	8.82	0.05	174.64		
							174.64	**7482.24**	**1306668.46**
16	**Providing and laying bituminous concrete 40mm thick with 100-120 TPH** batch type hot mix plant producing as average output of 75 Tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 To 5.6% 5.00 of mix and filler, transporting the hot mix To work site, laying with a hydrostatic paver finisher with sensor control To the required grade, level and alignment, rolling with smooth wheeled, vibraTory and tandem rollers To achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects, with 40 mm compacted thickness (Grading II) with 6% Bitumen 60/70 grade using 40-60 HMP using mechanical paver(P 179 It 21.22.6)	Cum							
	0		1	396.00	8.82	0.04	139.71		
	TOTAL						**139.71**	**12000.00**	**1676505.60**
17	**KSRRB M800-13.** Providing and Laying of **hot applied thermoplastic compound** 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.MORTH Specification No. 803(P-178/24.15) - **Road Marking**	Sqm							
	SIDE LINES		2.5	396.00	0.15		148.50		
	TOTAL						**148.50**	**475.20**	**70567.20**
18	*Cost of Plastic@ 8% of bitumen qty*								
	For Bituminous concrete						3137.40	27.00	84709.78
			COST OF ROAD WORKS						5237846.80
3.00	DRAIN WORK								
19	KSRRB 300 - 1 : **Earthwork excavation by manual means** in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / chapter 3 (P-138/19.1)	Cum							

Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
	For New Drain Excavation								
	LHS		1	335.00	0.90	0.60	180.90		
	RHS		1	367.00	0.90	0.60	198.18		
	For Culvert		1	7.40	1.50	0.90	9.99		
			1	5.60	1.50	0.90	7.56		
			1	6.00	1.50	0.90	8.10		
			1	6.90	1.50	0.90	9.32		
			1	5.50	1.50	0.90	7.43		
			1	5.00	1.50	0.90	6.75		
							428.22	**171.29**	73348.95
20	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix M10 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum machine mixed, machine mixd, concrete laid in layers not exceeding 15cms thick, well compacted, in foundation and plinth, cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specifications No. KBS 4.1, 4.2. I.No-4.20 of KPWD S.R 2014-15	Cum							
	For Culvert		1	7.40	1.50	0.10	1.11		
			1	5.60	1.50	0.10	0.84		
			1	6.00	1.50	0.10	0.90		
			1	6.90	1.50	0.10	1.04		
			1	5.50	1.50	0.10	0.83		
			1	5.00	1.50	0.10	0.75		
							5.46	**6,400.00**	34,944
21	KSRB 5.3-3: Providing and constructing granite/trap/basalt size stone masonary in basement with cement mortat 1:6, edges of stones chistle dressed in courses not less than 15cm high, bond stones at 2m apart in each course including cost of mterials, labour, scaffolding, curing complete as per specifications. As per item 5.9 Page 23, PWD SR Bangalore Circle(2014-15)	Cum							
	For Culvert		2	7.40	0.45	0.6	4.00		
			2	5.60	0.45	0.6	3.02		
			2	6.00	0.45	0.6	3.24		
			2	6.90	0.45	0.6	3.73		
			2	5.50	0.45	0.6	2.97		
			2	5.00	0.45	0.6	2.70		
							19.66	**4650.00**	91400.40
22	KSRB 4-1.7 Providing and laying in position plain cement concrete of nominal mix M15 for coping concrete using cement @ 220kgs, with 20mm and down size graded metal coarse aggregate @ 0.84 cum and fine aggregates @ 0.56 cum, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specifications No. KBS 4.1, 4.2 as directed by the Engineer and as per detailed tender specifications.etc., complete. As per item 4.6, Page 13 PWD SR Bangalore Circle(2014-15)	Cum							
	For Culvert		2	7.40	0.45	0.075	0.50		

Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
			2	5.60	0.45	0.075	0.38		
			2	6.00	0.45	0.075	0.41		
			2	6.90	0.45	0.075	0.47		
			2	5.50	0.45	0.075	0.37		
			2	5.00	0.45	0.075	0.34		
							2.46	**5300.00**	13,022
23	Providing granite slabs of selected qualitynroughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete 7.5cm thick of KPWD S.R 2014-15 As per PNO 25 I NO 5.31.1 PWD SR Bangalore Circle(2014-15)	Sqm							
	New Drain								
	LHS & RHS		1	335.0	(0.45+0.60+		502.50		
			1	367.0	(0.45+0.60+		550.50		
							1053.00	**700.00**	737100.00
24	Pre-cast Drain Cover Slab {size 1.5x0.6x0.1}:- Providing and laying pre-cast drain cover slab of 100mm thickness in CM1:3 including cost of all materials,labour,curing, transportation, loading, unloading etc.,as per doiirections of the Enineer-in-charge {Data Rate sheet enclosed}	Sqm							
	For Drain Covering Slab		1	335.0	0.90		301.50		
			1	367.0	0.90		330.30		
							631.80	**1700.00**	1074060.00
25	Providing & laying precast drain cover slab of 250 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge.(1.50 x 0.45 x 0.25)	Sqm							
	For Cross Roads/Culverts		1	7.40	1.5		11.10		
			1	5.60	1.5		8.40		
			1	6.00	1.5		9.00		
			1	6.90	1.5		10.35		
			1	5.50	1.5		8.25		
			1	5.00	1.5		7.50		
							54.60	**5000.00**	273000.00
		COST OF DRAIN AND CULVERT							2296875.45
4.00	**KERB STONE**								
26	Providing and fixing **pre cast solid cement concrete kerb** stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete.(P-25/5.30, 5.29(b))	No							
	kerb								
	LHS & RHS		1	335.00			335.00		
			1	367.00			367.00		
							1560.00		
	0.45 Each Kerb Length						**1560.00**	**310.00**	483600

Sl.No	Description of Work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
27	KSRRB M800-6. Painting two coats on New Concrete Surface:-Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces complete as per specifications. MORTH Specification No.803 (P-177/24.7) - On Kerb Stone	Sqm							
	kerb		1	335.00		0.40	134.00		0
	LHS & RHS		1	367.00		0.40	146.80		
							280.80	66.00	18,532.80
	EXTRA ITEM								
28	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4(P-24/5.26.2) SR 2016-17	Sqm							
	LHS & RHS		2	335.00		0.20	134.00		
			2	367.00		0.20	146.80		
							280.80	980.65	275,366.07
	COST OF KERB STONE & FOOT PATH								777,498.87
								Total Construction Cost	9539925.12
								Design & PMC	100000.00
								Utility Shifting Chares & Electrical Works	360000.00
								Rounding off	74.88
								Grand Total Rs.	10000000.00

CERTIFICATE

1) The site has been inspected and the work is found to be necessary.
2 The rates adopted are as per PWD SR of 2014-15 & 2016-17
3) The provisions were made in this estimate are necessary and adequate.
4) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.

Assistant Engineer
Project Division, Yelahanka Zone
B.B.M.P

Assistant Executive Engineer
Project Division, Yelahanka Zone
B.B.M.P.

Executive Engineer
Project Division, Yelahanka Zone
B.B.M.P.

9/6

"Modified Estimate Sanctioned"

Page 7 of 7

Chief Engineer
Yelahanka Zone
Bruhath Bangalore Mahanagara
Palike
Bangalore 92